

**Third Year B. Tech., Sem V 2021-22**

## **Programming Lab 3**

### **Practical No- 8**

**PRN/ Roll No: 2019BTECS00070**

**Full name: Prathmesh Basaweshwar Killedar**

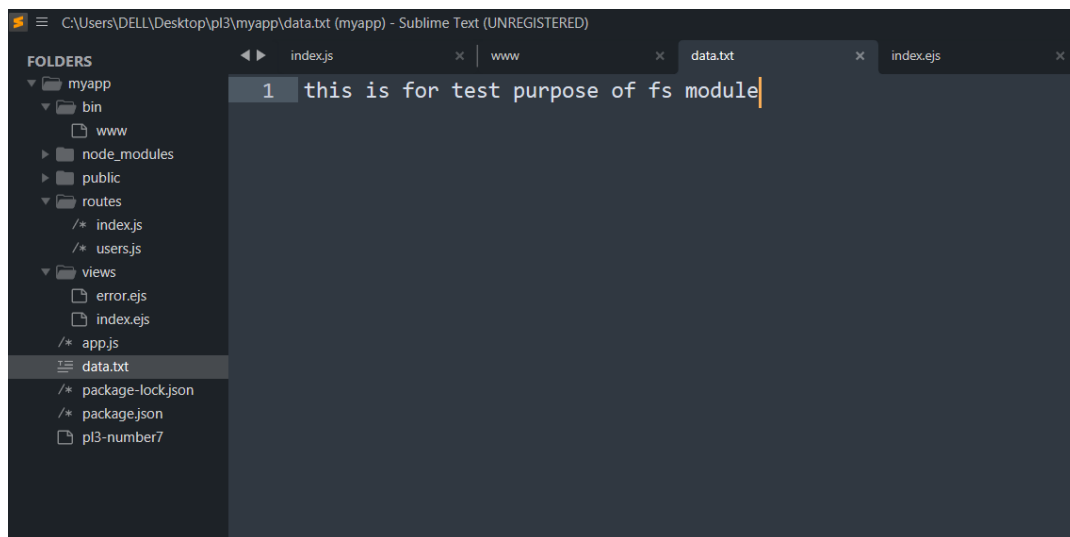
**Batch: T2**

#### **Problem Statement 1:**

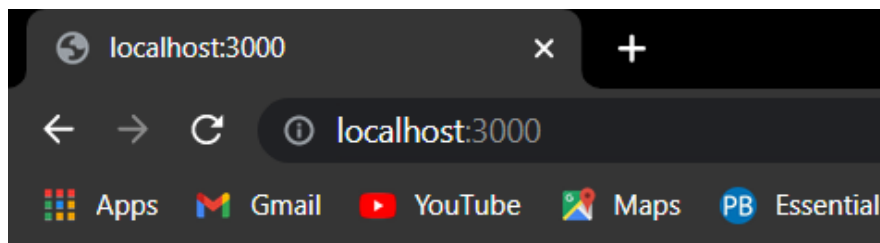
1. With the help of suitable examples use following Node.js pre-built modules in Node.js Application.

A. FS module:

--->Read:



```
1 var express = require('express');
2 var router = express.Router();
3
4 /* GET home page. */
5 router.get('/', function(req, res, next) {
6   res.render('./data.txt', 'utf-8', (err, data) =>{
7     if(err){
8       console.log(err);
9     }
10    else{
11      res.send(data);
12    }
13  });
14 });
15
16 module.exports = router;
17
```



this is for test purpose of fs module

--->Write:

C:\Users\DELL\Desktop\pl3\myapp\routes\index.js (myapp) - Sublime Text (UNREGISTERED)

FOLDERS

- myapp
  - bin
  - www
  - myapp
  - node\_modules
  - public
  - routes
    - index.js
    - users.js
  - views
    - error.ejs
    - index.ejs
  - app.js
  - data.txt
  - package-lock.json
  - package.json
  - pl3-number7
  - writedata.txt

```
1 var express = require('express');
2 var router = express.Router();
3 var fs=require('fs');
4
5 /* GET home page. */
6 router.get('/', function(req, res, next) {
7   fs.readFile('./data.txt','utf-8', (err,data) => {
8     if(err){
9       console.Log(err);
10     }else{
11       res.send(data);
12     }
13   });
14   var data ='Test writing string to check function';
15   fs.writeFile('writedata.txt',data,err=>{
16     if(err){
17       console.Log(err);
18     }
19   });
20 });
21
22 module.exports = router;
23
```

C:\Users\DELL\Desktop\pl3\myapp\writedata.txt (myapp) - Sublime Text (UNREGISTERED)

FOLDERS

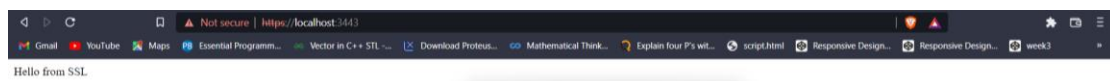
- myapp
  - bin
  - www
  - myapp
  - node\_modules
  - public
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    - index.js
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  - writedata.txt

```
1 Test writing string to check function
```

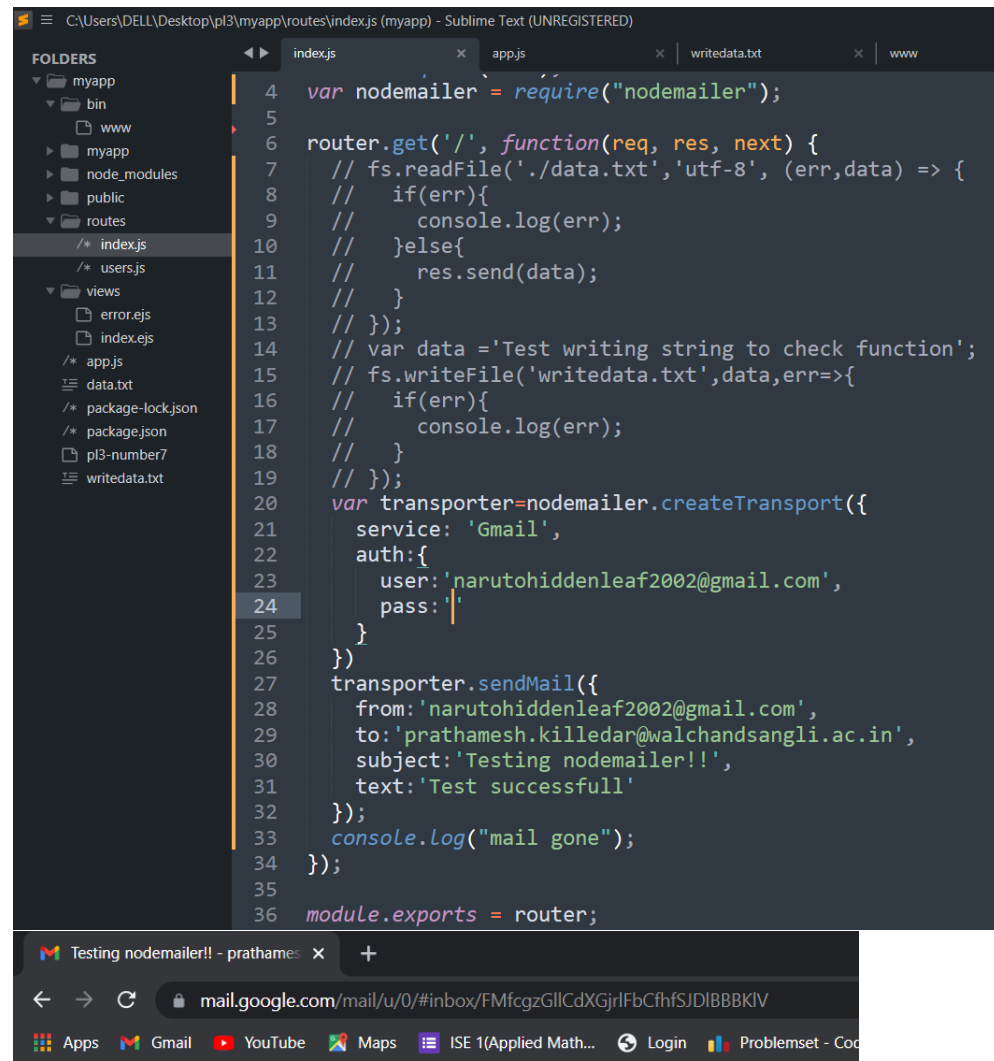
## b. Secure HTTP Module (https)



```
1 const express = require('express');
2 const https = require('https');
3 const path = require('path');
4 const fs = require('fs');
5
6 const app = express();
7
8 app.get('/', (req, res) => {
9   res.send("Hello from SSL");
10 })
11
12 const sslServer = https.createServer({
13   key: fs.readFileSync(path.join(__dirname, 'cert', 'key.pem')),
14   cert: fs.readFileSync(path.join(__dirname, 'cert', 'cert.pem'))
15 }, app)
16
17
18
19 sslServer.listen(3443, () => {
20   console.log("Secure server on port 3443");
21 })
22
```



### c. Nodemailer Module (nodemailer) :



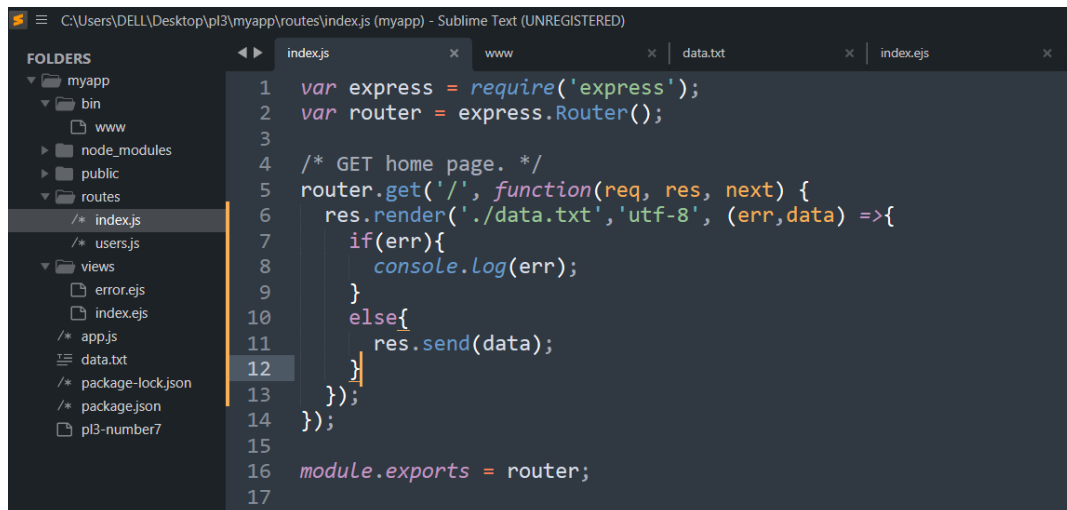
The screenshot shows a Sublime Text editor window with the file `index.js` open. The code defines a simple web application using Express.js that reads a file, writes to another, and sends an email using Nodemailer. The email is sent from `narutohiddenleaf2002@gmail.com` to `prathamesh.killedar@walchandsangli.ac.in` with the subject `Testing nodemailer!!` and the body `Test successfull`.

```
4 var nodemailer = require("nodemailer");
5
6 router.get('/', function(req, res, next) {
7   // fs.readFile('./data.txt','utf-8', (err,data) => {
8   //   if(err){
9   //     console.log(err);
10  //   }else{
11  //     res.send(data);
12  //   }
13  // });
14  // var data = 'Test writing string to check function';
15  // fs.writeFile('writedata.txt',data,err=>{
16  //   if(err){
17  //     console.log(err);
18  //   }
19  // });
20  var transporter=nodemailer.createTransport({
21    service: 'Gmail',
22    auth:{
23      user:'narutohiddenleaf2002@gmail.com',
24      pass:''
25    }
26  })
27  transporter.sendMail({
28    from:'narutohiddenleaf2002@gmail.com',
29    to:'prathamesh.killedar@walchandsangli.ac.in',
30    subject:'Testing nodemailer!!',
31    text:'Test successfull'
32  });
33  console.log("mail gone");
34 });
35
36 module.exports = router;
```

Below the editor, a web browser window shows the email received. The email is from `narutohiddenleaf2002@gmail.com` with the subject `Testing nodemailer!!` and the body `Test successfull`.

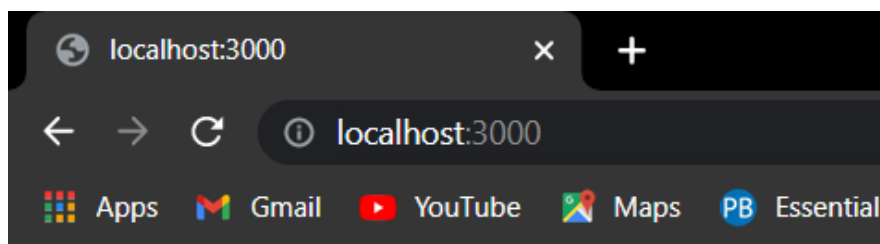
## Problem Statement 2:

1. Create a user defined module and use it in Node.js Application that uses HTTP server.



The screenshot shows a Sublime Text editor window with the file path `C:\Users\DELL\Desktop\pl3\myapp\routes\index.js (myapp) - Sublime Text (UNREGISTERED)`. The left sidebar displays a folder tree for `myapp`, including `bin`, `www`, `node_modules`, `public`, `routes`, `views`, `error.ejs`, `index.ejs`, `app.js`, `data.txt`, `package-lock.json`, `package.json`, and `pl3-number7`. The main editor area shows the content of `index.js` with the following code:

```
1 var express = require('express');
2 var router = express.Router();
3
4 /* GET home page. */
5 router.get('/', function(req, res, next) {
6   res.render('./data.txt', 'utf-8', (err, data) =>{
7     if(err){
8       console.log(err);
9     }
10    else{
11      res.send(data);
12    }
13  });
14 });
15
16 module.exports = router;
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```



this is for test purpose of fs module